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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,282	06/30/2004	Isaac Zolotarev	81101089 / FMC 1761 PUSP	4281
28395	7590	07/08/2008	EXAMINER	
BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			HONG, JOHN C	
			ART UNIT	PAPER NUMBER
			3726	
			MAIL DATE	DELIVERY MODE
			07/08/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/710,282	<b>Applicant(s)</b> ZOLOTAREV ET AL.	
	<b>Examiner</b> JOHN C. HONG	<b>Art Unit</b> 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 9-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,3,4,7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by EP0232018.

'018 discloses a spindle positioning apparatus for a robotic manipulator comprising: a mounting plate assembly attached to the robotic manipulator, the mounting plate assembly (38) having a fixed plate (the portion 40 attached) disposed proximate the robotic manipulator and a movable plate (the portion 42 attached) movably attached to the fixed plate; a first spindle (40) disposed on the fixed mounting plate assembly in a fixed position; a second spindle (42) disposed on the movable mounting plate assembly and movable with respect to the first spindle; and an actuator mechanism adapted to position the second spindle with respect to the first spindle (Fig. 1 ; Abstract ; col. 2, line 51-col. 3, line 1).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP0232018 in view of Mitchell (U.S. Patent 2807972).

'018 teach the limitation except the first spindle extends through the fixed plate and the second spindle extends through the movable plate.

Mitchell teaches the first spindle (11) extends through the plate (14) and the second spindle (12) extends through the plate(14) (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the apparatus of '018 by adding the feature of the first spindle extends through the fixed plate and the second spindle extends through the movable plate, as taught by Mitchell so as to permit rapid removal and replacement of individual tools (col. 1, lines 18 and 19).

5. Claims 2,5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over '018 in view of Oh (U.S. Patent 5943928).

Regarding Claim(s) 5 and 6, '018 teach the limitation the actuator mechanism further comprises a ball screw assembly having a ball nut and a ball screw, and a servo motor adapted to rotate the ball screw to actuate the ball nut; and the ball nut is attached to the movable plate and the ball screw is attached to the fixed plate.

Oh teaches the actuator mechanism further comprises a ball screw assembly having a ball nut and a ball screw, and a servo motor adapted to rotate the ball screw to actuate the ball nut; and the ball nut is attached to the movable plate and the ball screw is attached to the fixed plate (Fig. 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the apparatus of '018 by adding the features of the actuator mechanism further comprises a ball screw assembly having a ball nut and a ball screw, and a servo motor adapted to rotate the ball screw to actuate the ball nut; and the ball nut is attached to the movable plate and the ball screw is attached to the fixed plate, as taught by Oh so as to move the slider into the extended and retracted position along the guide slot of the saddle body (Abstract).

Regarding Claim(s) 2, it is well known in the art to utilize a linear slot and a pin to help to guide movement of the parts and It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize this known technique on the apparatus of '018 so as to guide movement of the parts.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection. See the new Office action. Applicant's argument on the restriction requirement made on 4/17/08, even independent claim 1, does not mention the linear slot and the movable plate include a pin, still claim 1 of subcombination does not require "a first mounting plate attached to the manipulator arm and having a first opening; a second mounting plate movably attached to the first mounting plate and having a second opening".

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN C. HONG whose telephone number is 571-272-4529. The examiner can normally be reached on M-F 9:00-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID BRYANT can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/JOHN C HONG/  
Primary Examiner, Art Unit 3726

Jh  
7/6/08